

# Washington State Transportation Commission Ferry Customer Survey

WSTC Commission Meeting / Project Update  
November 13, 2007



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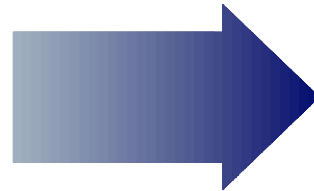
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# Statement of Purpose and Outcome

## Overall Purpose

- To gather information from a representative sample of ferry customers on their travel attitudes and behavior
- To identify fare policy, operational, and customer-centric strategies that could be effective in modifying demand for peak hour vehicular travel and/or increasing walk-on passenger traffic while continuing to accommodate demands for existing and future ridership



## Key Outcome

A better understanding of customer attitudes and behaviors to

- Estimate the impact of changes in fare policy, operational, and other customer-centric strategies on travel behavior and
- Inform decisions that will better utilize existing ferry capacity, increase operational efficiency, reduce the need for capital expansions, and improve cost-efficiency while maintaining ferry revenues

# Objective #1

- Design and implement a research methodology that provides a comprehensive **baseline** attitudinal and behavioral profile of Washington State Ferry customers, but focusing specifically on recreational, vehicle and walk-on (commuter and occasional), and freight customers, that will be used to inform current decisions and that can be updated in the future. This profile will include the following critical components:
  - Existing travel behavior
  - Environmental / personal factors that influence travel behavior
  - Capabilities / willingness to modify behavior
  - Demographics
  - Understanding how these characteristics vary by critical market segments

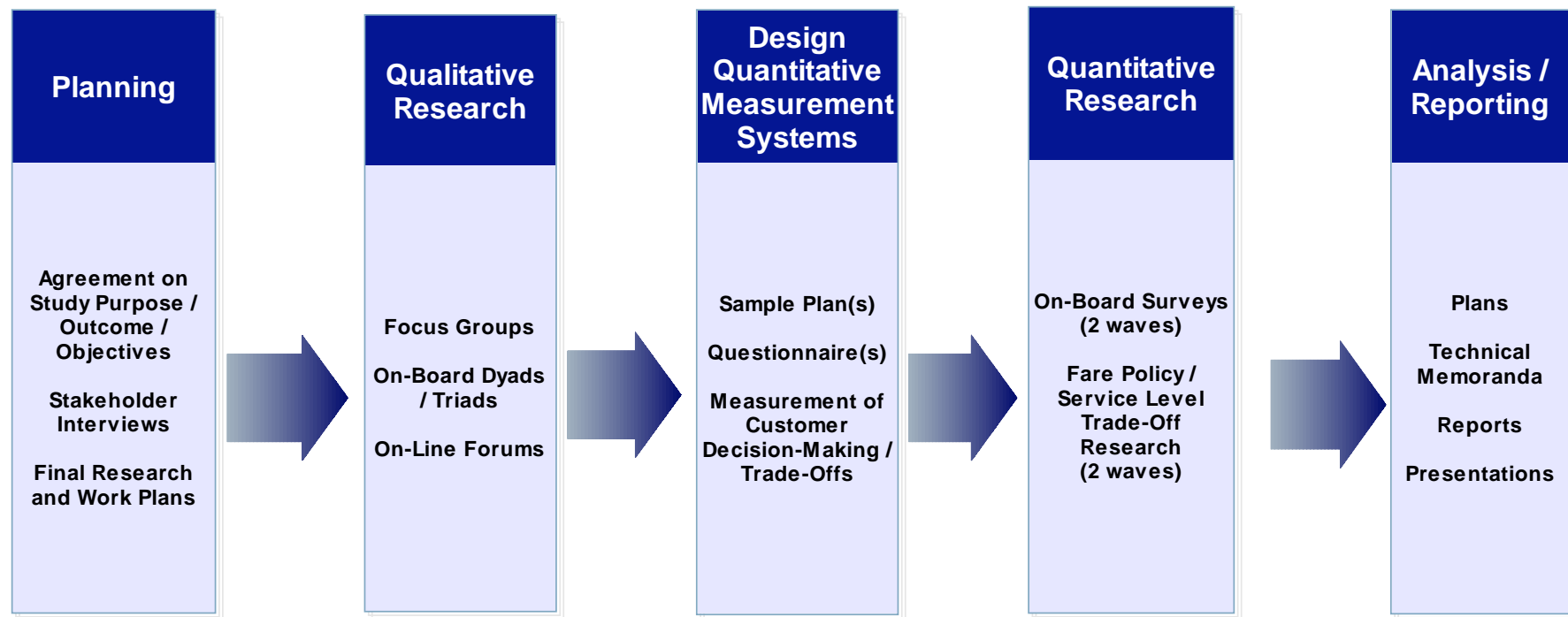
## Objective #2

- Identify and model data on the impact of changes to key operational strategies (overall attributes and levels of) that will inform level of service, operational, pricing, planning, and investment decisions and that could increase capacity utilization, level demand across schedule and routes, and accommodate existing and future ridership (system wide and within individual travel sheds)
  - To what extent would changes in fare policies and other operational strategies
    - Move vehicle passengers to become walk-on passengers
    - Shift vehicle passengers from peak to fringe travel periods and push vehicle passengers from fringe to off-peak travel periods
    - Encourage higher vehicle passenger occupancy and/or increase use of other modes of accessing the system
    - Shift freight customers from peak to fringe travel periods and/or from fringe to off-peak travel periods
    - Shift vehicle passengers from over- to under-utilized routes
    - Cause any change that would have a negative impact on system revenues by actually decreasing use of the system (users no longer ride or ride less often) and/or shifting behavior to an extent to which savings in capital improvements are less than loss in revenue
  - To what extent do changes to other operational strategies that are / could be considered (e.g., implementing a reservation system, vehicle loading options, alternative fare media, etc) affect desirable behavioral changes and/or offset the potentially negative impact of demand management pricing strategies

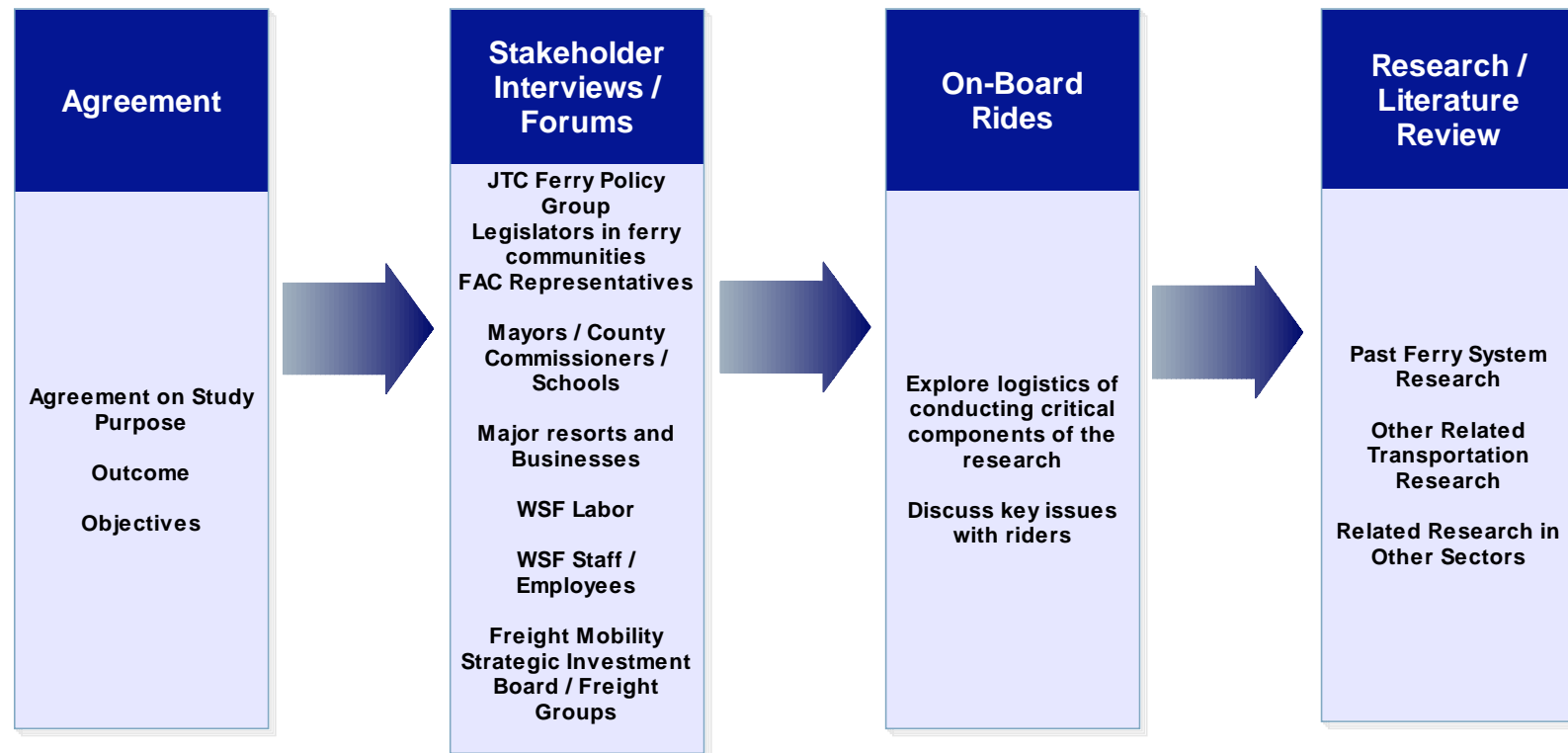
## Objective #3

- Provide input that can guide a review and update of WSF level of service standards and inform operational strategies that could improve capacity utilization, level demand across the schedule, and accommodate existing and future ridership
  - What are the levels of service from the customers' perspective (e.g., wait times, access to connections, loading, etc.) that affect customer use of / demand for service
  - What are customers' critical expectations for service and to what extent are these expectations being met
  - What other aspects of service could WSF or other partner agencies add to or improve that could positively impact travel behavior / system utilization and/or offset negative impacts of other policy changes

# Overall Study Process



# Planning Process



# Planning Process Schedule

Task	Start Date	End Date
Agreement on Statement of Purpose, Outcome, & Objectives	Mon 10/22/07	Tue 11/13/07
On-Board Rides	Wed 11/14/07	Fri 11/16/07
Stakeholder Interviews	Mon 11/19/2007	Fri 12/07/07
On-Line Forums	Mon 11/26/2007	Fri 12/07/07
Research / Literature Review	Mon 11/12/07	Fri 12/07/07



# Planning Process Outcomes / Deliverables

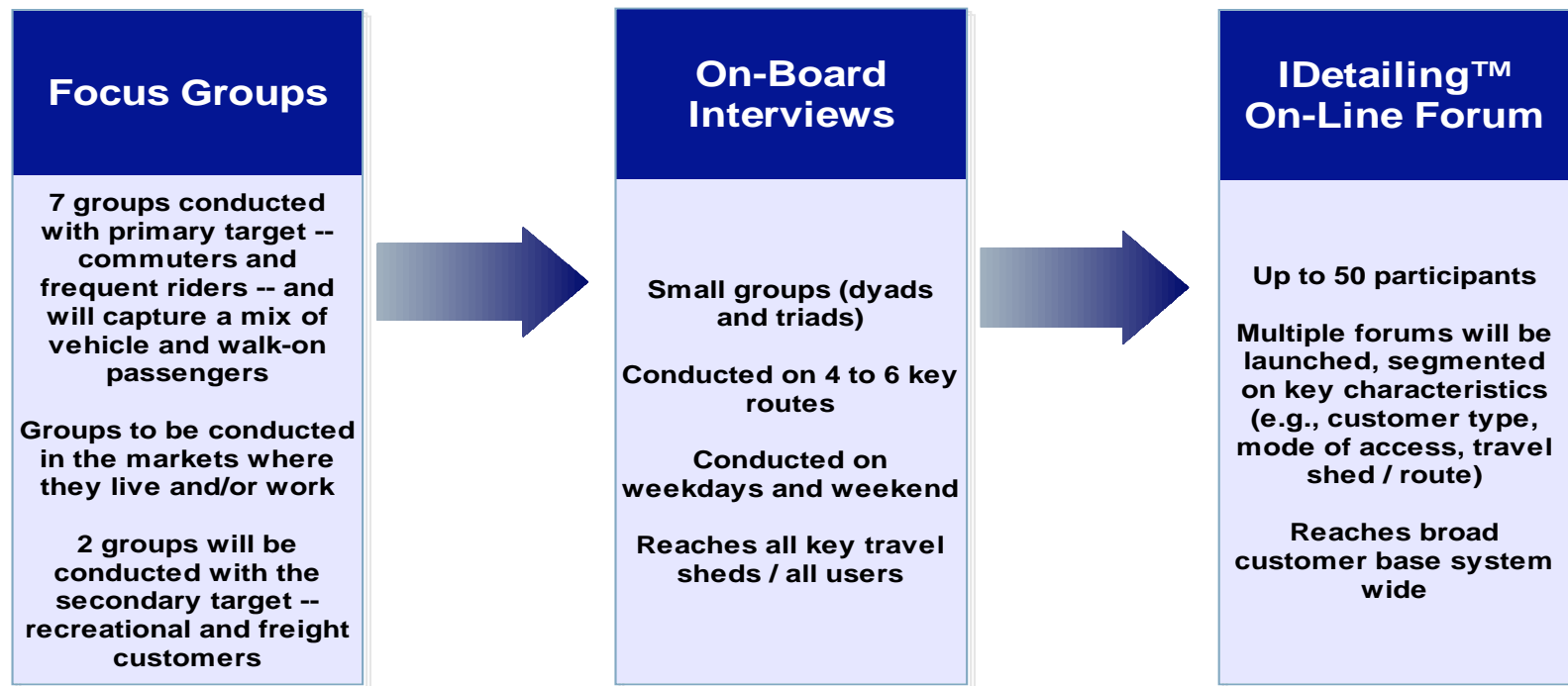
- Final Statement of Research Purpose, Outcomes, and Objectives
- Technical Memorandum summarizing findings from Stakeholder Interviews
- Technical Memorandum summarizing findings from Secondary Research / Literature Review
  - Discussion of the implications of these findings for the final research design and implementation
- Final Qualitative Research Plan and Schedule
  - Outline and scheduling of key tasks / subtasks for the balance of the research
  - Schedule to reflect an end date for the entire process of no later than October, 2008

# Qualitative Research Objectives

- Explore current travel behaviors, how customers think / talk about travel, and factors that influence travel decisions
- Understand current attitudes toward travel and assess preliminary impacts of pricing and operational strategies on ridership behavior
- Understand key customer characteristics and their potential impacts on attitudes, needs, and expectations for service
- Identify customer requirements / expectations for service and their willingness to trade-off some elements of service in order to encourage behavior change
- Understand current attitudes toward travel and assess preliminary impacts of pricing and operational strategies on ridership behavior
- Assess best methods for measuring impacts of pricing and operations strategies on ridership behaviors
- Use a mix of methods to reach a broad and representative base of ferry customers
- Provide an opportunity for commission, ferry, and other interested individuals to view focus groups

# Qualitative Research Process

- Objective is to use a mix of methods to reach a broad and representative base of ferry customers across all routes
  - Approach is anticipated to result in depth interviews completed with as many as 200 ferry customers
- Results will be used to guide the design of the quantitative survey instruments



# Focus Groups

Group	Composition	Location	Date / Time
1	Vehicle passengers who ride Seattle / Bainbridge route; commuters only	DT Seattle	Tuesday, 11/13/07 5:30 pm
2	Walk-on passengers who ride the Seattle / Bainbridge route; commuters only	DT Seattle	Wednesday, 11/14/07 5:30 pm
3	King County residents who ride the ferry; includes both regular and occasional passengers	DT Seattle	Wednesday, 11/14/07 8:00 pm
4	Vehicle AND walk-on passengers who ride the Fauntleroy / Vashon / Southworth or Pt. Defiance / Tahlequah routes; includes commuters and frequent riders	Vashon	Thursday, 11/15/07 7:00pm
5	Vehicle AND walk-on passengers who ride the Seattle / Bremerton route; includes commuters and frequent riders	Bremerton	Saturday, 11/17/07 10:00am
6	Vehicle AND walk-on passengers who ride the Edmonds / Kingston and Seattle / Bainbridge routes or the Edmonds / Kingston route only; includes commuters and frequent riders	Kingston	Saturday, 11/17/07 3:00pm
7	Vehicle AND walk-on passengers who ride the Mukilteo / Clinton or Keystone / Port Townsend routes; includes commuters and frequent riders	Coupeville	Sunday, 11/18/07 1:00pm
8	Vehicle AND walk-on passengers who ride the San Juan routes; includes commuters and frequent riders	Friday Harbor	T.B.D.
9	Freight users; meet with industry groups and business leaders	T.B.D.	T.B.D.

# Key Definition – What is a Frequent Rider

- **Commuters**
  - Take 24 or more one-way trips per month
- **Non-Commuters**
  - Take 7 or more one-way trips per month

# Dyads / Triads

- Routes to be determined following focus groups
  - Anticipate up to 6 routes; 3 round trips per route
    - One route will be the San Juans; Friday Harbor focus group to be conducted in conjunction with the on-board interviews
  - Scheduled to capture morning or afternoon peak periods but also one off-peak run
  - Interviews to be conducted with two to three individuals at a time
  - Scheduled to capture representative weekday (Wednesday or Thursday) and representative weekend day (Friday or Saturday)

# On-Line Forums

- Multiple forums segmented by audience type
  - Frequent riders
  - Other rider segments (to be determined)
  - Resorts / businesses in ferry communities
  - Mayors / county commissioners / school districts in ferry communities
- Recruited / screened by telephone to participate in forum
  - WSF database
  - Call-ins from flyer distributions / posters
- Forum format
  - Last 5 to 7 days
  - Questions posted on 1<sup>st</sup>, 3<sup>rd</sup>, and 5<sup>th</sup> day
  - Participants go on-line and respond at their convenience
  - Representative responses are posted on alternate (2<sup>nd</sup> and 4<sup>th</sup> days) so that participants can view responses and post additional thoughts

# Qualitative Research Schedule

Task	Start Date	End Date
Planning / Setup	Mon 10/29/07	Sun 11/18/07
Focus Groups	Mon 10/29/07	Mon 12/3/07
(Group Dates)	Tue 11/13/07	Sun 11/18/07
On-Board Dyads / Triads	Wed 11/28/07	Sat 12/8/07
Forums	Mon 12/01/07	Tue 12/18/07
Prepare Final Deliverables	Wed 12/19/07	Mon 1/21/08



# Qualitative Research Outcomes / Deliverables

- Technical Memoranda summarizing key findings from each of the qualitative research components
  - Listing of key attributes / levels of service that impact travel behavior / demand and ultimately capacity utilization
- Final Summary Report
- Video Presentation that includes audio and video clips illustrating key findings
  - This presentation will be prepared in a format suitable for web viewing
- PowerPoint presentations specific to target audiences of interest

# On-Board Surveys – Objectives

- Develop and implement a quantitative research methodology that yields reliable and statistically valid results
  - Use a data collection method that provides reliable data at the aggregate level but also allows for reliable analysis among key subgroups
- Provide a comprehensive attitudinal and behavioral profile of WSF customers
- Assess extent to which customers can / will change travel behaviors
- Identify critical level of service standards from a customer perspective
- Build a customer panel for use in other research

# On-Board Surveys – Approach

- On-board surveys
  - Ensures most reliable data and gains representation of all customer groups within each travel shed and across all routes
  - Most efficient and cost-effective means for sampling ferry riders
- Two waves
  - February / March & July
  - Anticipate that initial wave will be larger; second wave will be designed to capture the recreational users
- Stratified sampling plan
  - By route and/or travel shed
  - By passenger type (vehicle versus walk-on)
  - Anticipate a total sample size of 13,000 to 14,000 completed surveys (over the two survey periods)

# On-Board Surveys – Outcomes / Deliverables

- Comprehensive attitude and behavioral profile of WSF customers
  - By customer type (walk-on / vehicle; frequency of riding; trip purpose)
  - By route or travel shed
- Other Analysis
  - Develop key segments
  - Sensitivity to changes in fare structures and levels of service
- Reports and Presentations
- Panel for additional research

# Follow-Up Fare Policy and Service Level Research – Objectives

- Identify fare policy and operational strategies that would:
  - Cause vehicle passengers to become walk-on passengers
  - Shift vehicle passengers from peak to fringe travel periods and push vehicle passengers from fringe to off-peak travel periods
  - Encourage higher vehicle passenger occupancy rates and/or increase use of other modes to access the system
  - Shift vehicle passengers from over- to under-utilized routes
  - Shift freight customers from peak to fringe travel periods and/or from fringe to off-peak travel periods
- Assess the extent to which customers can or would modify their travel behaviors
- Identify transportation and other operational components that would need to be in place to support future behavior shift

# Follow-Up Fare Policy and Service Level Research – Approach

- On-line surveys

- Administered to sample of customers drawn from an on-line panel developed as part of the on-board surveys
  - Anticipate that approach will yield 2,000 plus completed surveys
- Use of conjoint or other method to simulate actual choices customers are likely to make under different scenarios / service options

- Actual test

- Experimental design in which customer segments actually operate under different scenarios for a period of time
- Could again use panel members

# Follow-Up Fare Policy and Service Level Research – Outcomes / Deliverables

- Assessment of the importance of overall factors that affect demand for / use of service
  - By customer type
  - By route or travel shed
- Assessment of sensitivity to the specific levels within these overall factors
  - By customer type
  - By route or travel shed
- Simulation model
  - Provides the capability to test “what if” scenarios and measure the potential impact on demand for / use of service
- Reports and Presentations

# Phase 1 Quantitative Research Schedule

Task	Start Date	End Date
On-Board Surveys – Wave 1	Mon 12/3/07	Fri 5/2/08
Actual On-Board Surveys	Thu 2/21/08	Sat 3/22/08
Fare Policy and Service Level Research – Wave 1	Fri 3/28/08	Wed 8/27/08
On-Board Surveys – Wave 2	Mon 6/2/2008	Wed 9/10/08
Actual On-Board Surveys	Fri 6/27/08	Sun 7/27/08
Fare Policy and Service Level Research – Wave 2 (if needed)	Mon 7/14/08	Tue 9/30/08
Prepare Final Deliverables	Tue 8/5/08	Tue 9/30/08



# Phase 2 Research

- Objectives

- Provide a mechanism for additional follow-up research to address specific issues / questions that come out of the quantitative research

- Approach

- Could be qualitative or quantitative and is dependent on the objectives and nature of information required

- Schedule to be determined

- Approximately \$68,000 reserved for this effort

# Opinion Research Northwest Project Team

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